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As a lecturer in Stanford's Department of Management Science and Engineering, Ravi Belani regularly teaches MS&E 472, the Stanford course associated with the Entrepreneurial Thought Leaders series. He is also the managing director of Alchemist Accelerator, an accelerator program that focuses on enterprise businesses and has funded startups like LaunchDarkly, Rigetti Computing and Zipongo. Before Alchemist, he spent four years as an associate at the VC firm DFJ. There, he was instrumental in backing the company that later became Twitch, which was acquired by Amazon for \$970 million in 2014. In this talk, he draws on his keen observations of the Silicon Valley ecosystem to identify the factors that align to create the most transformational venture-scale businesses.



Transcript

- [Announcer] Who you are defines how you build.. (audience applauds) - Today we're gonna be talking about building venture scalable businesses, or billion dollar businesses, and I wanted to say that that is just one slice of entrepreneurship.. It is an important slice, but it is a narrow slice, and I wanna caveat this by saying that your first job, if you feel the calling of entrepreneurship, is to reflect within about what is authentically right for you, and then to courier the resources, talent, and capital to get your mission to be realized.. If that can align with the venture-backed model, you can do amazing things, but every company and every venture is different.. The second thing I just wanna say is, is that my intention here is to really distill the nuggets of insight that I've collected along the way over the 20 years since I was in your seat as a Stanford student, and to share those nuggets.. Every now and then you'll pick out, pick a nugget of insight that will come to you in life, to try to distill those for you for anybody who is going down this path.. My defining professional work experience was in venture capital, and so that is why this talk is gonna be about building billion dollar businesses.. So we're gonna be talking about building these grand scale types of businesses.. So with that, let me first give some further details about who I am.. I graduated from Stanford with a Bachelor's in Engineering and a Master's in Industrial Engineering..

When I was at Stanford, one of my hallmark experiences was as a Mayfield Fellow, and I worked at a, as an intern at a startup called Extensity that went public.. I then worked at McKinsey in San Francisco, and then at another startup with other Mayfield Fellows called Zaplet that raised \$100 million in venture capital, but then ultimately failed.. But my canonical work experience was as a venture capital at DFJ in Menlo Park.. So at DFJ, we funded, and I got to see companies grow, like Skype, Tesla, Baidu, SpaceX, so some phenomenal companies from the sidelines.. The one company that I championed when I was at DFJ was a company called Justin.tv, which Draper associates led an investment into.. That became Twitch, that was acquired for just shy of \$1 billion by Amazon.. So that was my first unicorn experience.. Then DFJ became the anchor investor in the accelerator that I now run called Alchemist.. So Alchemist is backed by a bunch of VCs and other reputable institutions, and we write small checks into a lot of companies a year.. We give typically \$36,000 to 70 startups a year, and we were fortunate enough to be rated the Top Accelerator in 2016 by CB Insights based on how much money our companies raised, and we generally are viewed as one of the top overall accelerators..

We focus on any startups that monetize from enterprises.. I mention that because we have seen the model of building startups on that venture back path, we've had 137 companies close capital, they've raised almost \$1 billion, and we've had 34 acquisitions, and these are some of our graduates, some of whom have also been ETL speakers in the class.. But we many companies that are emerging out of Alchemist that have literally raised over \$100 million capital and that are on that path of becoming a \$1 billion unicorn-based startup.. So with that, that is the experience that I have to inform the talk today.. The first thing that I want to, you guys to understand is in good, whenever we teach the spirit of entrepreneurship, we start from within, but then we also teach good, classic customer development and design thinking, and when you're starting that, when you're looking at these models, I want you to also understand the incentives and the motivations of the venture capitalists that are providing the fuel that drives this specific type of entrepreneurship, and it is a very powerful type of entrepreneurship.. I think this a slide that I also, when I was at Stanford that we, that I remember Tom would use, but this, the industry, venture capital, is a powerhouse of an industry.. It's just .2% of our GDP, and it's responsible for creating companies that are responsible for over a fifth of the economy.. So it is a power house of an industry, but it's a very idiosyncratic industry, because literally, of the 10,000 startups that get produced a year, only 10 are responsible for 97% of the returns, and so if you

grok that further, as a venture capitalist, if you are, have a fund, it is very difficult for that fund to economically survive unless that fund is able to back companies that become worth a billion dollars, and these are famously called, from former ETL speaker Aileen Lee, unicorns.. I love that name, but also, there's an issue with that name because they aren't fictitious, they actually exist, and part of our intention with this class is to demystify these unicorns as being real people who have flaws just like everybody else, but build big companies, and part of what I wanna do today is just to unlock some of the hidden dynamics of how to build these billion dollar unicorns.. But if you are a venture capital and you have a billion dollar fund, you're getting that money from others, and your job is to pay that money back..

So if you think about that, if your goal is to pay back a billion dollars, that means, and if you assume that a venture capital fund can own 20% of a company, and if they own too much, it creates incentives problems with the entrepreneurs, that means to pay back a billion dollars, you need to have five companies in your portfolio that become worth a billion dollar, does that make sense? That's just to pay back the fund 1X.. To pay back the fund three times, to make money, you have to have 15 unicorns, and so returning a fund can be like catching lightning in a bottle, and the big issues is, is that historically, there's only around 25 companies that get created every year that become worth even at least just half a billion or above.. So that is the nut of trying to figure out how to crack the venture capital industries as a venture capitalist.. In some sense, you are a unicorn hunter.. If you do not fund a company that becomes worth that amount, it is very difficult, if you have a certain fund of a certain size, to stay economically viable.. So with that, we are gonna talk today about are there any secrets around building companies that become worth a billion dollar, or building these venture scalable businesses? The key insight here really is, comes, is distilled down from the Archimedes quote, you know, Archimedes famously said that if you, "give me a lever long enough "and a fulcrum on which to place it, "I can move the earth." The notion there is is that if you architect a system in the right way, for the same amount of effort, you can have a disproportionate return.. Former ETL speaker Ben Horowitz, who's a famous venture capitalist at Andreessen Horowitz, he said this, I think in another way, where he basically says it takes as much work to start a mediocre business as it does to start a big business, so you might as well go big.. You know, I can assure you that if you are not succeeding as an entrepreneur, you're not working any less.. You're working as hard if not harder to get by.. So if you were gonna go down the path of entrepreneurship, you will be working hard, and if you're gonna be working hard and you have a mission that you care about, part of the beauty of the opportunity that exists if you do align with venture capital is that if you go big, in some ways, more resources can be thrown at you to solve that problem..

So right now then, what I wanna discuss is how, what are the, what is the architecture that you can do to sort of invoke that Archimedes principle to create these disproportionate returns? The key insight here is to go from zero to hero, you need to walk exponentially as opposed to linearly.. So we all know the difference between linear and exponential? This is Stanford, I know this is Silicon Valley.. But if I'm walking linearly, it's just one, two, three, four, right.. If I walk exponentially, it's one, two, four, eight, sixteen.. You know, if you're going from a million dollar valuation today to a billion dollar valuation in 10 years, what that means is that you need to grow 1,000X in 10 years.. To grow 1,000X in 10 years, that means you need to grow 10X three times.. Does that make sense? So 10X every three years.. To grow 10X every three years, you need to triple every year and a half or double roughly every 12 months.. I know it's basic math, but just grokking that, or just internalizing that will make a lot of other things clear about how the dynamics of Silicon Valley work.. So just to make this graphical, this is the growth of the internet from the '60s to the 2000s, and it looks fairly linear, but it's plotted on a logarithmic scale..

But if you're the internet, it looks like things just grew at a normal pace, they just grew linearly.. But if I shift that scale from a logarithmic scale to a linear scale, that same data looks like this, and suddenly it looks like something drastic happened in the late '90s.. There was a knee in the curve and everything suddenly changed.. But the reality was that the internet, the dynamics of how the internet was growing, was steady.. It was just architected in a way to grow multiplicatively, and we, who experience the world linearly, felt it as this big shift that happened in the late '90s.. So we've already sort of gone over the math of this, but basically we need to sort of double every year to get to that billion dollar outcome in 10 years, or if you wanna do it in a shorter period of time, you have to grow even quicker.. We all understood, I think, the difference between different growth rates.. So now then the question becomes, so Ravi, what are these architects, or these mechanisms, these drivers to architect something for multiplicative growth? The, I'm gonna, we're gonna talk about a few, but the overriding principle that I want you to understand is thinking about how you set things up so that there's positive reinforcement loops, so that every action you take has a multiplicative affect and not just a linear affect, so that the output is not a linear function of the input, but is a multiplicative output.. So let me make this clear.. So we're gonna start with the first, a first driver, which is just simply gross margins..

Gross margins is just the revenue minus the gross costs of producing an item.. So let's say that I am selling a cookie, and it costs me 50 cents to make a cookie, and I know all those ETL students are really hungry after they hear those lectures.. So I camp out outside of class, outside of Huang, and my intention is to sell you a cookie.. If I sell you that cookie for \$1, my gross margins are 50 cents.. I sell you the cookie for \$1, it costs me 50 cents to make, I make 50 cents of profit which means that how many cookies can I make next? One cookie, okay.. I sell that other cookie for \$1, I make 50 cents of profit, and I can make one more cookie.. So at 50 cents, or a 50% margin, my slope is zero, does that make sense? I am basically just making one cookie every cycle.. If I have the insight to say, you know what, I'm not gonna target the Stanford students, I'm gonna go to the faculty club.. That's where they have the money, and I'm gonna charge a buck 50 for that cookie, suddenly, just by shifting the price up to \$1.50, my margins go from 50% to 67%, but I sell that cookie for \$1.50 at the faculty club, it cost me 50 cents to make.. I make a dollar of profit which means how many cookies can I make? I can make two cookies..

If I sell both of those two cookies for a buck 50 each, it's \$3, it costs me a dollar to make, I have \$2 in profit, which means I can make four cookies.. So just by doing that subtle shift of having the gross margins go from 50% to 67%, I'm suddenly on a multiplicative path.. Does that make sense? At 75, and let's say, you know what, if you're like, you know, it's not the faculty club, it's the Stanford Mall, that's where the real money is.. All the venture capitalists go and they shop there.. I'm gonna go to the Stanford Mall and sell that cookie for \$2 and it only costs me 50 cents.. Suddenly I make 75% margins or a buck 50.. I sell one cookie for 50 cents for \$2, I make \$1.50 of profit, I can then produce three cookies.. If I sell those three cookies for \$2 each, that's \$6.. It cost me \$2, I make \$4 of profit, and then I keep going up.. So 75% then gets us at this magic growth clip of 3X..

I can start growing 3X at 75%.. So one of the golden rules, by the way is, is that if you do not want to raise venture capital, but you're like, I do wanna build a billion dollar business, if you can have your margins be 75% or higher, and if you can bill upfront, if you can have people pay you before you have to build the product, so if you can have people pre-pay for a year of Spotify before you deliver the service or pre-pay for a magazine, then you can be customer-funded and put yourself on that 3X growth curve to keep hitting things.. This is why venture capitalists love software, because the costs, as we increase these margins, our growth rates become even more absurd, and if you think about what's, with software, the cost of doing a Google search, the gross costs are just the energy of that server.. It's basically, it's basically nothing.. This is why VCs hate hardware.. I mean, just to oversimplify.. I don't wanna speak for all of venture capitalists, but hardware requires capital, you know, that you have to put in money.. Your gross margins are lower.. You need to worry about distribution and all these other things.. So these are some questions that I would ask if I was a venture capitalist, and then I would also wanna arm you to understand if you're a founder building a business that's seeking venture capital or just trying to build a big business is understand what your gross margins are..

If you're building hardware, understand what your Bill of Materials are, and if you are building something that's gonna be hardware-like, then you need to be able to answer the question of how do you finance the business to cover your Cost of Goods, and that's a separate discussion that we can have later.. Does that make sense? So that's, lesson one is gross margins.. The next things that I think is a source, and these are just sources of multiplicative growth, of exponential growth.. They exist everywhere.. Everywhere you see these positive reinforcing loops where the input can lead to a multiplicative output, pay attention.. But the other thing is technology, and this is why investors love to fund companies that are built on new tech, because tech is inherently exponential in how it grows.. This is the classic Kurzweil graph on Moore's Law, and I know we have a sophisticated audience here.. Moore's law is just this notion that the density of transistors doubles every year and a half for the same price point effectively.. You, everybody knows this experientially when you go and you buy your next smartphone.. It seems like it can do everything, so much more than it could a year and a half ago..

That, this trend has held true since the early 1900s.. Technology grows naturally on a multiplicative curve because the outputs of technology are the, become the inputs to drive the next generation of technology.. We use the Intel chips to build the computers that design the next Intel chips, if that makes sense.. So the outputs become the inputs, and it naturally has an exponential curve.. You see this all over technology, this is the growth of the internet, which we had before, which is doubling every 12 months.. This is magnetic data storage, which doubles every 15 months.. But the core essence here is, is that technology is an invitation.. It's an opportunity to really enter into a market with a weapon that might be creating a new opportunity that you didn't have before.. So I would say, actually, the essential question that venture capitalists are looking for, especially what I've seen from the top tier venture capitalists, is answering the question of why now? What technologically exists now in your business that didn't exist before that allows your business to succeed? So the essence of that is, why couldn't this business have been done three years ago, and you should have an answer to that.. If it technologically could have been done three years ago or five years ago, it's very hard, oftentimes, for somebody to believe that just no one of the other six billion people in the world just didn't have the idea..

What's more likely is that somebody tried the idea and it failed for a, for other reasons.. But if there was a technological reason why your business couldn't have existed before, then that is credible, then it sort of makes sense that nobody could have done it until now.. So answering that why now question is a very powerful one for both VCs and entrepreneurs.. Again, you know, we talk about exponential curves, but really exponential curves are just what we call s-curves, where you're having some technology that then becomes more mainstream, and then it gets replaced by another s-curve, and the cascading of those becomes this exponential curve.. So a couple questions, then, that you should think about if you're a founder or that you might be ready to be asked if you go and present in front of an investor is, if you are gonna argue that you're riding on some new technology, or you're developing a core new technology as part of your offering, they'll, be prepared to answer, is this technology advantage 10X better than the alternative? The reason why investors will ask you for 10X is because just secularly, with Moore's law, everything doubles every 18 months.. So at least with the 10X advantage, you have three 18 month doubling periods of a buffer, or around four years of a buffer.. If you have less than 10X, the world is gonna catch up to you anyways.. So think about if it's something significant.. The other questions that I would ask is that, if I was a customer and I was gonna evaluate you, what metrics would I use to asses you versus the alternatives, and how would you fare on those? If it's, if the advantage is something algorithmic, think about what the trade off is.. Are you sacrificing speed for quality, or something else? You don't also need to deal with something that is just purely technological..

You know, the iPhone was really the birthplace of so many great companies like Uber, Spotify, Instagram, that technically weren't really building the core disruption.. They were riding on the wave of the iPhone, and that also is a fantastic, 'cause if

you can ride an existing platform that is newly existing, that just came out, that also can create huge benefits and be well-received.. But then just be prepared to answer why you're gonna out-execute everybody else, and you can say, "Hey, we're using "this new technology platform, "but we're gonna out-execute everybody else "for these reasons." I would say that this is, it's gonna be a very fun time if you, to be an entrepreneur right now.. Because of the acceleration of Moore's law and because of how quick technology is expanding, we are going to see, 20,000 years of historical progress is gonna be the equivalent of what's gonna happen in the next 100 years, or in this century.. So if you just extrapolate Moore's Law going forward, there are some intimidatingly amazing implications.. The first is is that we achieve the capability of a human brain for about \$1,000 by the time most of, by 2023, when most of you, I guess, will be 21 in this class.. When you guys, when, if you're a Stanford student today, by the time you're 37, we'll have the capability of a human brain for a penny, and by the time you're in your late 40s, we'll have the human race's capability for \$1,000, and by the time you're in your 50s, it'll be whole human race for a penny.. So if you can grok your mind to think exponentially, to think about where the puck is headed and resist our natural tendency to extrapolate the future from the linear past, there's so many opportunities, there's so much power in democratized, commoditized technology to take on, all the, very, very deep, deep problems that the world is facing.. So that's technology as a source of multiplicative growth.. The final one, and I do wanna make sure that we have enough for Q&A, so a finally one to touch upon, I would say, is network effects, which I know is sort of a buzzy term that everybody talks about these days, but everybody understands what a network effective, a network effect is something where a product becomes more valuable as it scales its users..

So as the volume of a product, which is an amazing thing.. So usually, as you scale volume, quality suffers.. You know, as you get bigger, you worry that you're gonna be delivering less quality.. But if you build a business that has network effects, the opposite holds true.. As you get bigger, you deliver more value.. The classic example of this is Skype or WhatsApp or any communication tool.. So if there is only, if I tell everybody right now that, hey, I just built RaviApp.. It's exactly like WhatsApp, it's technically identical, everybody should use it, nobody's gonna join RaviApp, even though I'm technically identical to WhatsApp, because the network is on WhatsApp, and the value is the network.. So, or, for example, with Skype, if there is only one person on Skype, how many, you can make zero calls.. If there's two people, you can make one call..

If there's three, you can make three, if there's four, you can make six.. Every extra node that gets added to the network increases the number of connections, and that's generally referred to as Metcalfe's Law, where the value of a communication platform is a proxy to the square of the nodes.. So that's why communication-driven platforms like Skype or WhatsApp can be incredibly powerful.. Others have calculated the value, not just as the square of the nodes but also as an exponential, as a 2 to the n value based on the permutations of the subgroups.. So if you look at the value of Facebook based on all the multitude of subgroups that can emerge, you get an even greater response.. But the idea here is that if you build a business with network effects, every single additional node creates more value for each individual user.. Just to show you how powerful this is, if you look at Facebook, this is Facebook, and it is impressive how quickly Facebook grew.. So Facebook grew at an impressive rate, and that is the red line that you see there at the bottom.. But what's even more impressive is the green dots are their revenue.. The line next to the green dots is a proxy of Metcalfe's Law, that, you know, that exponential growth that we were showing..

So as impressive as their user growth was, what was even more impressive was that their revenue was growing exponentially because of the network effects that are inherent in a social network.. To juxtapose that, there's other great companies, or great phenomenon.. This is Angry Birds, so you guys know Angry Birds, right.. Angry Birds is a single-player mode game phenomenon.. So if I'm playing Angry Birds, that does not increase the value of your Angry Birds experience.. It is your, your Angry Bird's experience does not increase with the volume of the users.. So Angry Birds was amazing, but it was completely linear in terms of, its revenue was just a function of how many people downloaded it.. It didn't become more valuable at scale.. So thinking about how you can build businesses with network effects can also be very powerful, and these again occur, really whenever there's a positive feedback loop.. That can be communication, like Skype, or WhatsApp, or any social network that we've talked about..

It can be a marketplace, so Craigslist or eBay are classic examples of really hard businesses to displace, even though the technology is very, very basic, because there's liquidity of buyers and sellers together on this common marketplace.. Or it can be a platform, like the Apple operating system, where developers are building on top of, every developer that adds to Apple's operating system extends the functionality of the operating system, which then also creates more value, valuable, value for everybody's that's involved.. So there's a type of marketplace that happens with platforms.. It's no, but, and I should say, I was sort of speaking disparagingly about hardware a few minutes ago, and you might say, you know, if hardware's so bad, why do you have all these beautiful software businesses like Google, that spent \$3.2 billion on Nest, which is a hardware device for the home, or Facebook, which spent over \$2 billion for Oculus, which is these hardware devices, why is hardware so disparaged if in fact these beautiful software business models are spending a lot of money for them? I would argue it's because Facebook is buying Oculus because they don't wanna be beholden to Apple, which is the hardware platform that they are underneath.. Because every time somebody downloads a Facebook app for your iPhone, that becomes another user that another platform can use for themselves.. So they may lose Facebook users to other platforms that they're trying to compete with.. So ultimately, they're beholden to the underlying platform, which is what they wanna own.. So I would argue that's why they went out to buy, so the saving grace here, what I wanna say is that these platforms, or network effects, can be incredibly powerful, and they can override even many of the other things that I was discussing before.. It's no coincidence, then, that the four of the tech companies that became worth \$1 trillion all have network effects at play.. Amazon's one of the biggest

marketplaces, Apple has an operating system, it has communication-driven tools and marketplaces..

All of these exist because, for a reason, and there's a reason why that drove such huge, huge growth.. But I also wanna say that there's a bunch of, so these are some of the questions that you should be ready to answer if you are a founder, and you're seeking a venture capitalist who's trying to rule you in or out as a unicorn.. They may ask a question of, you know, let's say you convince them that your idea is a good idea.. They'll say, "Well, if you prove out your market, "if you prove out that what you're doing is great, "and a competitor creates a feature "identical ripoff of your product, "why would a new customer still choose you?" Really what they're asking is, "Are, do you have any network effects?" Just like nobody would use RaviApp, even if it's technically identical, because it's not about the technology, it's about the network.. They're asking, is there a longterm differentiation that you have, besides just the short term differentiation? They may ask, "Do you view your offering "as a product or a platform?" Again, the platform is, is there strategic value in the customer, beyond just the initial service you provide? You know, think about if you wanna focus on monetization, engagement, or growth.. If you're building something that has network effects, it may be important to focus on the longterm game of growth or engagement first.. I wanna end though, by, with a note about, there are a lot of companies that have network effects that don't become a \$1 trillion, or I think we're gonna be ending, we were, we started talking about billion dollar businesses, let me now end by talking about trillion dollar businesses.. So we have those four examples, Apples, Amazon, Microsoft, and Google, our alphabet, that are now trillion dollar companies, and there are a lot of companies that have, there are a lot of companies that have a lot of smart minds, that can learn everything that I'm saying and hire the best, smartest minds, and don't become trillion dollar companies.. I think one thing that's hard to argue with is that all four of those companies, not, besides just having and going after network effects, they all, and this is informed from a piece of deeper analysis that Geoff Moore did about five years ago on Apple and Amazon, but they, all four of those companies had founders at the helm as CEOs when they were publicly traded companies for a long period of time.. I think that is not a coincidence, because there is something about a founder that has the earned authority of its employees and its constituents and its stakeholders, that can move companies in directions that even the smartest minds can't..

There's something about the founder experience, of starting from zero to one, where you go through your own journey of getting knocked down and knowing who you are, and being able to actually get in touch with that core, enviable spirit that exists in bad times or good, and this is sort of a time of reflection.. It's sort of a time of really getting actually in touch with that spirit that becomes an indomitable power, even when you become famous and big.. Really, these companies aren't just companies.. These are companies that build other companies, and I think that's, you know, if you think about how Apple has moved from a desktop company to all these, becoming the biggest music company, the biggest phone company to now the biggest payments company, or how Amazon went from an online bookstore to the biggest utility cloud computing company and now the biggest home AI company, that is not a simple, linear, academic map.. There is something else going on.. What I want you to understand is that the essence of all of this, there is an entrepreneur behind these great big, fictitious seeming companies that are unicorns, or trillion-corns, that is the indomitable spirit that is impossible to replicate or copy.. So really the lesson that I would have for you today is to get in touch with what that means for you, because you, anybody can copy your technology.. Nobody can copy you.. So don't worry about trying to be somebody else.. Just get in touch with what your best self is, and then courier the resources around you to have that vision be realized..

All of you founders are heroes in that sense.. So thank you.. We have about 10 minutes, so I just wanted to make sure that we had enough time for questions.. Yes, back there.. - [Audience Member] So I was wondering, you were talking about how Moore's Law might return exponential growth for the next century, but there are some people who think Moore's Law is slowing down 'cause we're getting like, transistor sites are getting too small.. So do you think that we're still gonna be able to maintain that same pace, innovation, or valid on computers? - Yes, this is a great question.. So this is question, I was saying that Moore's law looks like it's gonna keep continuing, but there's a lot of people that are arguing that Moore's law is gonna hit its limits because of a variety of reasons, including the heat density of transistors hitting certain physical limits and so forth.. I think that's actually a good example of the s-curves cascading.. So Moore's law is that exponential curve, and if you noticed that example that I showed of Moore's Law starting back in the early 1900s, those weren't electric transistors in the early 1900s.. Those were sometimes physical gates that were the original switches..

I do think that transistors, as semiconductor transistors as we know it may hit physical limits, but I think there'll be a new paradigm that may replace those.. So whether that's quantum computing or some other variant that will allow us to shift that thing forward, I do think that there, that is what is historical has held true.. So in my opinion, it's not, I wouldn't conflate Moore's Law with transistors.. Transistors is one technology s-curve, and Moore's Law is a cascading of s-curves that move over time.. - [Audience Member] Question.. - Oh, I'm gonna call on, so Tina Seelig, I'm very honored to have Tina here.. - [Tina] Great, I'm curious, does a founding entrepreneur need to have all of those things in place at the beginning, when they're conceptualizing their company, or are these things that can evolve over time? - So the question from Tina is, does a founding entrepreneur need to have all these things in place when they're starting their company, or is this something that can evolve over time? You do not need to have all of these things when you are starting a company.. So, I think the irony of the path of entrepreneurship is that it is this bifocal exercise, where, in the beginning, probably the most important thing is focusing, that there's, I think the hardest thing when you're starting out as an entrepreneur is that the worst decision can sometimes be indecision.. Most of the decisions are gonna be very gray and blurred, and if you overwhelm yourself with too many things, it can be paralyzing.. So I do think that Tina's question, and underneath that, is a good lesson, which is, I don't want this to cripple or paralyze the entrepreneurial spirit..

When you're beginning, the key thing, I think, is to find something to like and to start liking it.. Find some observation that can come from a variety of places.. It can come from people, it can come from the market, it can come from a trend, and start to just apply a curious mind to unearth what's going on there, and have that dance between you and it to tell you what needs to happen.. This, then, becomes a toolkit, I would say, to help you reality test certain things.. So if there is a way that any of these things can be applied, it can help support that growth.. So even just on gross margins, if you can collect your cash up front versus later, that can have a profound, just tactical impact on your business, but it's not the essence of entrepreneurship.. These are just helpful adjustments effectively on the path, thanks, Tina, yes.. - [Audience Member] I love Teslas, but when I look at all your criteria, when you funded it, what made you fund it? - Oh, that's a great question.. So the question is, I love Tesla, but if you look at all of my criteria, why would you fund it? So Tesla, I would say, and even SpaceX, which DFJ funded, and I do need to say that a lot of that is a testament to Stephen Jurvetson's genius, who is the venture capitalist who championed those investments at DFJ.. But that's sort of the classic thing that you would learn in business school not to fund, because, for all the reason why you said..

It's hardware, it's capital intensive, with SpaceX it can literally blow up.. So why would you fund that? I think the idea here is, is that really the genius of Elon Musk is is that what you see as a car is not a car, and what you see as a rocket is actually not a rocket.. It's a question of shifting your viewpoint of what that is.. If you view Tesla as a car company, it is not something that you would normally fund, but if you view it, really, as an autonomous software platform, - And a data gatherer.. - And a data gatherer, yeah, exactly, that is using this physical instrument of a car to do that.. It becomes a totally different opportunity and company.. - [Audience Member] Do you see it exponentially? - Yes, I do.. I think anybody who has a Tesla probably sees that as well.. I think it's because it's, a Tesla is not a car company.. I think it is, more, in my view, it is a profound data gatherer and operating system that gets..

- The revenues are linear? - Oh, so the question is, the revenues are linear.. So there's a, so, so I don't wanna go into too many details around this, but there is a difference between what's called willingness to pay and actual monetization, and I think this goes back to this question of, well, how do you think about the balance between monetization and growth and engagement? Sometimes, if you try to focus on monetization at the wrong time, you can win the battle but lose the war, and I think there might be some of that going on with Tesla's considerations on things.. Yes, in the back.. - [Audience Member] Hi, so thanks so much for your talk.. It was really inspiring to me.. I guess my question is that a lot of times in this startup culture and the Valley, you hear about the idea that you don't necessarily have to be the first mover in a market, and you can just take an existing idea and execute it far better.. So as a seasoned VC, as someone really who really has been entrenched in this industry for a while, could you talk a little bit more about what your thoughts are on that idea? - Yes, so the question is, there is this notion that you don't necessarily have to be the first mover if there's another idea, if you can be effectively a fast follower, that can also be a path to success, and some, and perhaps it might be even better.. There is this saying that trailblazers carry arrows in their back.. So I do think that, I think the, I do think there's a, multiple different types of companies if you're looking at it just purely from a financial lens that can become successes, but I do think it's important to understand what your strategy is gonna be.. So, if you are a fast follower, I think you wanna be very explicit about why, what you have to believe to believe you're going to win, and what are the lessons that you can take and learn, and then what are the lessons that you're gonna do to extend your competitive differentiation..

So there's lots of examples of good companies that weren't the first.. Google wasn't the first search engine, it was, you know, at the time, I think there was over a dozen well-funded search engines.. There was a company called Friendster before Facebook that was funded by many of the top funds.. So a lot of the canonical companies that we look at today actually weren't the first, and I do think there is some virtue in seeing, there is some virtue in understanding timing, where if you see that a phenomena is emerging, usually, from a venture perspective, competition is validation, not something that rules you out.. So when, if, a venture capitalist will often ask you, who are the competitors, who are the alternatives? If there is a space that is an opening from a financial perspective, there's usually gonna be three companies that will become significant winners.. One will usually go public but be unacquirable, and then the other two will oftentimes get acquired by the existing incumbents that are trying to keep their power positions.. So I do think the important thing is to identify is there's an, there's a broader market opportunity, and then to think about if it's something that you really wanna care about.. Because there is the battle of getting table stakes with whoever the front runner is, but that's not gonna win the war.. What's gonna win the war is building something that's a longterm, viable concern, and that has to come from something more than just tryin' to copy somebody, but really trying to extend where they're at.. But I do think it can be a very effective strategy, you just have to be very focused on what you need to get done to displace them, yes..

- [Audience Member] So investments, as you've noted, aren't necessarily, could stick up or down.. Can you talk a little bit about your involvement as, you know a unicorn, if it has its bumps in the road going up, and you know, ultimately if an investment doesn't work out, how you've kind of chosen to step away? Any measures you've taken in between? - Okay, yes, be happy to.. So the question is, can you talk about my involvement as, when we're backing unicorns, just how that progression occurs, especially if there are speed bumps around the way, or even worse, if there's things that retreat backwards.. You know, the interesting thing is, is that if you fund a company that becomes a unicorn, oftentimes, they're companies that are, become these phenomena that require the least amount of work sometimes, because they just, you're in these moments of time and space where things just become, they grow phenomenally quickly.. In those moments, sometimes the bigger issues are around helping the companies or thinking about how the companies are gonna scale.. But as a venture capitalist, oftentimes, when you're needed the most is when the companies are in moments of crisis.. So the irony here is that sometimes

the companies that grow the quickest need the least amount of help, and then usually you get called in and consumed when there's something critically going around.. The caveat to that, I would say, is on strategic transactions, that's where your investors are, can be incredibly critical.. So I can assure, I can tell you that the strategic transaction of Twitch's acquisition by Amazon, that was a very, and I'm not saying that that was me at all, but that was a very important strategic transaction to get that right, and at those moments, a very helpful board can be very, very critical.. Honestly, a lot of your time is spent when there are those speed bumps, and they happen in so many ways..

Many times, though, what happens is understanding how the companies are shifting and going through different phases where the thing that you were prioritizing before is not the thing that you need to prioritize in this next phase.. So if you were prioritizing growth before, now you have to shift to monetization, or from engagement to growth.. Understanding those inflection points I think is where a helpful board member can really be involved in shifting the company, and then in very specific strategic transactions, sourcing talent, partnerships, acquisitions, things like that.. (audience applauds) (upbeat music)..